

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-17 (Canceled).

Claim 18 (Previously Presented): An optical scanner comprising:

a plurality of light source units spaced from each other along a first direction, each having an optical axis along which a light beam from the light source unit is emitted;

a deflection unit that deflects the light beams together in a single plane at an angle with respect to the light beams and scans the light beams along a second direction perpendicular to the first direction;

a plurality of imaging units that form an image with each of the light beams on a corresponding surface to be scanned;

a housing unit that holds the light source units, the deflection units, and the imaging units, the housing unit including a beam merging unit located on the axes between the light source units and the deflection unit, configured to direct the light beams to the deflection unit such that distances between the light beams along the second direction are decreased in a sequence in which the light beams are arranged, wherein

the beam merging unit includes a plurality of separate mirrors each located on one of the optical axes between the light source units and the deflection unit, each of the plurality of separate mirrors is disposed on a separate bracket that is staggered with respect to other brackets, and

a beam turning unit that turns the light beams scanned by the deflection unit in a sequence corresponding to the sequence,

wherein the plurality of imaging units include a plurality of toroidal lenses having an optical face tangle error correction function of the deflection unit, and

each of the plural toroidal lenses images respective light beams deflected by the deflection unit in a spot on the corresponding surface to be scanned.

Claim 19 (Withdrawn): The optical scanner according to claim 18, wherein each of the light source unit comprises an abutting surface along a direction perpendicular to the optical axis of the light source unit, and abutting against a common support member configured to hold the light source units together.

Claim 20 (Withdrawn): The optical scanner according to claim 19, wherein the abutting surfaces are held so as to be substantially on a same plane.

Claim 21 (Withdrawn): The optical scanner according to claim 18, wherein at least one of the light source units comprises a light emission source from which the light beam is emitted, and the light beam is emitted from the light emission source along a direction not parallel to the optical axis instead of along the optical axis.

Claim 22 (Withdrawn): The optical scanner according to claim 21, wherein at least one of the light source units comprises a plurality of light emission sources, and light beams are emitted as the light beam from the light emission sources so as to intersect with each other.

Claim 23 (Withdrawn): The optical scanner according to claim 22, wherein inclinations of planes with respect to a plane perpendicular to the optical axis, the planes on which the light emission sources are located, are adjustable.

Claim 24 (Previously Presented): The optical scanner according to claims 18, further comprising:

a plurality of pre-deflection imaging units each located on one of the optical axes between the beam merging unit and the light source unit corresponding to the optical axis, and that converges the light beam from the light source unit in the first direction on a deflection plane of the deflection unit,

wherein respective distances between light source units and the pre-deflection imaging units differ from each other relatively to a sequence in which the light source units are aligned in the first direction.

Claim 25 (Previously Presented): An optical scanner comprising:

a plurality of light source units spaced from each other along a first direction, each having an optical axis along which a light beam from the light source unit is emitted;

a deflection unit that deflects the light beams together in a single plane at an angle with respect to the light beams and scans the light beams along a second direction perpendicular to the first direction;

a plurality of imaging units that form an image with each of the light beams on a corresponding surface to be scanned;

a housing unit that holds the light source units, the deflection units, and the imaging units, the housing unit including a beam merging unit located on the axes between the light source units and the deflection unit, configured to direct the light beams to the deflection unit such that distances between the light beams along the second direction are decreased in a sequence in which the light beams are arranged,

a beam turning unit that turns the light beams scanned by the deflection unit in a sequence corresponding to the sequence, and

a plurality of pre-deflection imaging units each located on one of the optical axes between the beam merging unit and the light source unit corresponding to the optical axis, and that converges the light beam from the light source unit in the first direction on a deflection plane of the deflection unit,

wherein convergences of the pre-deflection imaging units differ from each other relatively to a sequence in which the light source units are aligned in the first direction.

Claim 26 (Previously Presented): The optical scanner according to claim 18, wherein the beam merging unit converges the light beam from the light source unit corresponding to the one of the optical axes in the first direction on a deflection plane of the deflection unit, arranged on a plane parallel to the first direction.

Claim 27 (Withdrawn): The optical scanner according to claim 24, wherein each of the light source units comprises at least a light emission source, and the light emission sources are disposed substantially on a same plane.

Claim 28 (Withdrawn): The optical scanner according to claim 25, wherein each of the light source units comprises at least a light emission source, and the light emission sources are disposed substantially on a same plane.

Claim 29 (Withdrawn): The optical scanner according to claim 26, wherein each of the light source units comprises at least a light emission source, and the light emission sources are disposed substantially on a same plane.

Claims 30-51 (Canceled).

Claim 52 (Previously Presented): An optical scanner comprising:

a plurality of light source units spaced from each other along a first direction and configured to emit light beams;

a deflection unit that deflects the light beams together in a single plane at an angle with respect to the light beams and scans the light beams along a second direction perpendicular to the first direction;

a plurality of imaging units that form an image with each of the light beams on a corresponding surface to be scanned, and include a lens shared by the light beams and having no diffractive power in the first direction; and

a beam merging unit configured to turn at least one of the light beams at a different position, wherein a distance from a turning point on the beam merging unit to a deflection point on the deflection unit decreases for each consecutive light beam along the first direction,

wherein the beam merging unit includes a plurality of separate mirrors each located on one of the optical axes between the light source units and the deflection unit, each of the plurality of separate mirrors is disposed on a separate bracket that is staggered with respect to other brackets,

wherein the plurality of imaging units include a plurality of toroidal lenses having an optical face tangle error correction function of the deflection unit, and

each of the plural toroidal lenses images the respective light beams deflected by the deflection unit in a spot on the corresponding surface to be scanned.

Claim 53 (Withdrawn): The optical scanner according to claim 52, wherein the beam merging unit is positioned such that a sum of an incident angle and a reflection angle to and from a turning mirror of the beam merging unit is acute.

Claim 54 (Withdrawn): The optical scanner according to claim 52, wherein at least two of the light source units are positioned opposite to each other relative to an optical axis of the lens in a cross section in the second direction.

Claim 55 (Withdrawn): The optical scanner according to claim 52, wherein distances between centers of the light beams are equal.

Claim 56 (Withdrawn): The optical scanner according to one of claim 52, wherein a distance in the first direction between centers of a pair of central light beams of the light beams is greater than distances between centers of other pairs of adjacent light beams of the light beams.

Claim 57 (Previously Presented): An image formation apparatus comprising:
an optical write unit that forms latent images on image carriers, a development unit that develops the latent images as toner images; and
a transfer unit that transfers the toner images onto a sheet of paper,
wherein the optical write unit includes an optical scanner having:
a plurality of light source units spaced from each other along a first direction and configured to emit light beams;
a deflection unit that deflects the light beams together and scans the light beams along a second direction perpendicular to the first direction;

a plurality of imaging units that form an image with each of the light beams on a corresponding surface to be scanned, and include a lens shared by the light beams and having no refractive power in the first direction; and

a beam merging unit configured to turn at least one of the light beams at a different position, wherein a distance from a turning point on the beam merging unit to a deflection point on the deflection unit decreases for each consecutive light beam along the first direction,

wherein the beam merging unit includes a plurality of separate mirrors each located on one of the optical axes between the light source units and the deflection unit, each of the plurality of separate mirrors is disposed on a separate bracket that is staggered with respect to other brackets,

wherein the plurality of imaging units include a plurality of toroidal lenses having an optical face tangent error correction function of the deflection unit, and

each of the plural toroidal lenses images the respective light beams deflected by the deflection unit in a spot on the corresponding surface to be scanned.

Claim 58 (Original): The image formation apparatus according to claim 57, wherein the latent images formed by the optical write unit is electrostatic, the image carriers are photosensitive bodies having the surfaces to be scanned, the optical write unit scans the light beams emitted from the optical scanner and including color image information respectively onto the surfaces to be scanned to form the latent images, the developing unit converts the latent images to visual images as the toner images using color toners corresponding to the color image information of the light beams respectively, and the transfer unit transfers the toner images onto the sheet of paper to obtain a color image.

Claim 59 (Previously Presented): The optical scanner according to Claim 18, further comprising:

an optical face tangle error correction optical unit provided on the optical axis of each respective light beam deflected by the deflection unit.

Claim 60 (Previously Presented): The optical scanner according to Claim 59, wherein each optical face tangle error correction optical unit includes a cylindrical lens and one of the plurality of toroidal lens.

Claim 61 (Previously Presented): The optical scanner of claim 18, wherein the plurality of separate mirrors are configured to each branch off a light beam and to have the toroidal lenses with the optical face tangle error correction function on a light path for respective branched-off light beams.

Claim 62 (Previously Presented): The optical scanner of claim 52, wherein the plurality of separate mirrors are configured to each branch off a light beam and to have the toroidal lenses with the optical face tangle error correction function on a light path for respective branched-off light beams.

Claim 63 (Previously Presented): The image formation apparatus of claim 57, wherein the plurality of separate mirrors are configured to each branch off a light beam and to have the toroidal lenses with the optical face tangle error correction function on a light path for respective branched-off light beams.